

85767

The Temperature-extinction of Luminescence S/048/59/023/011/001/012  
of the Crystal Phosphor ZnS-Ag With Excita- E019/3060  
tion by Light or  $\alpha$ -Particles

extinction curves. Thus, the following was found for the mean excitation density:  $12500 \text{ wcm}^{-3} \sim 4 \cdot 10^{16} \text{ Mev} \cdot \text{cm}^{-3} \cdot \text{sec}^{-1}$ . Proceeding from these results, the path length  $l$  is then evaluated at roughly  $10^{-3} \text{ cm}$ , the radius  $r$  at roughly  $10^{-6} \text{ cm}$ , and the scintillation period  $t$  at roughly  $10^{-6} \text{ seconds}$ ;  $\eta \sim 0.25$  is obtained for the excitation efficiency. The authors thank A. A. Cherepnev and M. V. Danilova for the preparation of phosphor, and M. V. Fok for advice given. There are 3 figures and 6 references: 5 Soviet.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR  
(Institute of Physics imeni P. N. Lebedev of the Academy  
of Sciences, USSR)

Card 3/3

L 60456-65 EEC(b)-2/EPA/EPF(c)/EPR/EPA(s)-2/EWT(1)/EWT(m)/EWA(c)/T Pi-4/  
Pr-4/Pt-7/Paa-4 LJP(c) GG/WW/JWD

ACCESSION NR: AP5007573

S/0020/65/160/005/1136/1137

45

44

3

AUTHOR: Rayevskiy, A. V.; Manelis, G. B.; Boldyrev, V. V.; Votinova, L. A.

TITLE: Role of dislocations in the process of thermal decomposition of ammonium perchlorate crystals

SOURCE: AN SSSR. Doklady, v. 160, no. 5, 1965, 1136-1137, and insert facing p. 1135

TOPIC TAGS: ammonium perchlorate crystal, crystal defect, dislocation density, thermal decomposition

ABSTRACT: During the thermal decomposition of  $\text{NH}_4\text{ClO}_4$  crystals, the dislocations were observed by etching the surface of the crystals in 95.5% ethanol and continuously watching it under a microscope (at high magnifications, the etchant itself served as the immersion liquid). It was shown that the etch patterns are not related to surface defects, but to dislocation loops present in the crystal, and that the highest dislocation density arises at the point where the load is applied to the crystal when its plastic deformation is carried out. Polygonization was observed when the crystals were annealed. Crystals which had first been heated up to the decomposition temperature were also etched; the dislocation density was found to be

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L 60456-65

ACCESSION NR: AP5007573

high around the nucleation center. The great similarity between the anisotropy of the arrangement of dislocations and the anisotropy of the development of the decomposition reaction of  $\text{NH}_4\text{ClO}_4$ , as well as the localization of the nucleation centers near the exits of dislocations to the surface of the crystal, point to the major role which dislocations, as structural defects, can play in the thermal decomposition of ammonium perchlorate.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences, SSSR)

SUBMITTED: 21Jul64

ENCL: 00

SUB CODE: SS, TD

NO REF Sov: 001

OTHER: 000

b7D  
Card 2/2

by V.E.T., B.C., 1928, 1000 AM, R.M., 1948.

Self-start of synchronous motors during the automatic switching in  
of reserve. Trans. energet. 20 no. 10-16-27 G 165.

(MIR 18:10)

PLESKOV, V.I., dotsent; MAGAZINNIK, G.G.; RAYEVSKIY, B.A., inzh.

An electronic drive for a 750 mm. blooming mill. Elektrichestvo  
no.7:70-75 Jl '62. (MIRA 15:7)

(Electric driving)  
(Electric current rectifiers)  
(Milling machines—Electric driving)

20195  
S/194/61/000/005/010/078  
D201/D303

12 2200

AUTHORS:

Gorin, A.V., Grosman, V.A., Drapchinskiy, L.V.,  
Rayevskiy, B.N., Romanov, L.P., Storozhenko, E.P.,  
Fedorov, Yu.P., Shavrin, G.M. and Shamov, V.P.

TITLE:

A mobile radiometric emergency laboratory using  
semiconductor devices

PERIODICAL:

Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 5, 1961, 31-32, abstract 5 A235 (Dokl. nauchn.  
konferentsii in-ta radiats. gigiyeny po itogam rab-  
oty za 1959, g., L., 1960, 18-19)

TEXT: A description is given of a complete mobile laboratory,  
mounted on the automobile YA3 -450 A (UAZ-450 A) and which is to be  
used for detecting radioactive isotope contamination of certain  
areas or of separate objects. The laboratory equipment consists  
of the following: 1) automatic recorder of the level of  $\gamma$ -back-  
ground from 10 to  $10^5$  microcurie/hr (MFR -МРС-5)(IRG-PGS-5)); 2) 2

Card 1/2

X

28195

A mobile radiometric emergency...

S/194/61/000/005/010/078  
D201/D303

calculating machines ((ИРГ-ПП-100)(IRG-PP-100)); 3) supplies 200-  
2000 V; 4) head screening (thickness 40 mm) for counter's CTC-5 (STS-  
5) in cassettes or for the end-counter; 5) rate counter ИРГ-ИП-1  
(IRG-IP-1) with counting rate up to  $10^6$  pulses/min; 6) beta-gamma  
portable scintillating radiometer with ФЭУ-25 (FEU-25) ИРГ-ПР-2  
(IRG-PR-2). Power for the whole installation is supplied by the  
automobile battery. Power consumption ~ 15 watt. The laboratory  
personnel consists of three operators and driver. Abstracter's  
note: Complete translation

X

Card 2/2

85345

9,7500

S/120/60/000/005/013/051  
E192/E382AUTHORS: Rayevskiy, B.N., Romanov, L.R. and Shamov, V.P.TITLE: A Counting Decade Based on TransistorsPERIODICAL: Pribory i tekhnika eksperimenta, 1960, No. 5,  
pp. 62 - 64

TEXT: A detailed circuit diagram of the device is shown in Fig. 1. The decade consist. of four bistable circuits and a diode reset key. The bistable circuits are based on transistors type П14 (P14). The circuits are reset to zero by momentarily applying the supply voltage to the collector of the lefthand-side transistor via a diode. Unlike in the standard decade circuits, a direct feedback is provided from the output of the bistable circuit  $T_1$  to the input of the circuit  $T_4$  and by providing a diode key between  $T_1$  and  $T_2$ . The decade operates as follows. Normally, all the bistable circuits are in their rest position, which is characterised by the lefthand-side transistor being closed and the righthand-side transistor conducting. A voltage of

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Card 1/3

85345

S/120/60/000/005/013/051  
E192/E382

A Counting Decade Based on Transistors

-10 V is applied to the key diode from the collector of the lefthand-side transistor of  $T_4$ . The divider  $R_{10}$  and  $R_{11}$  keeps the anode potential of this diode at -8V; consequently, the diode is conducting. Thus, the key transmits positive pulses to the input of  $T_2$ . The pulses appearing at the second input of  $T_4$  cannot operate it since its righthand-side transistor is open. The eighth pulse triggers  $T_4$  so that its lefthand-side transistor becomes conducting and the righthand-side transistor is closed. The voltage at the key diode will thus be increased to -1.5 V and the key becomes nonconducting to positive pulses. The ninth pulse changes the state of  $T_1$ , while the tenth pulse returns  $T_1$  and  $T_4$  to their rest position. The decade now produces a positive output pulse and returns it to its original state. The resolving time of the decade is 7  $\mu$ s and the power consumed by it is 0.15 W. The decade was constructed as a plug-in unit

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85345

S/120/60/000/005/013/051  
E192/E382

A Counting Decade Based on Transistors  
and its photograph is shown in Fig. 2.  
There are 2 figures and 5 references: 3 Soviet and  
2 English.

ASSOCIATION: Institut radiatsionnoy gigiyeny  
(Institute of Radiation Hygiene)

SUBMITTED: September 17, 1959

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Card 3/3

STARIK, I.Ye. [deceased]; GINZBURG, F.L.; RAYEVSKIY, B.N.

Diffusion method for studying the state of radioisotopes.  
Part 1: Methods of measuring the diffusion coefficients of  
radioisotopes in extremely dilute solutions. Radiokhimia  
6 no.4:468-474 '64.

Diffusion method for studying the state of radioisotopes.  
Part 2: Coefficients of Zr self-diffusion in hydrochloric  
acid solutions. Ibid.:474-479 (MIRA 18:4)

STARIK, I.Ye. [deceased]; GINZBURG, F.L.; RAYEVSKIY, B.N.

Diffusion method for studying radioisotopes. Part 3: Coefficients of diffusion of Sr(II), Ce(III), Am(III), Th(IV), Pu(IV), and Np(V).  
Radiokhimia 6 no.4:496-498 '64. (MIRA 18:4)

L 22537-65 ENT(m)/EFF(c)/EPA(w)-2/EWP(j)/T/EWP(t)/EWP(b) Po-4/Pr-4/Pab-10  
DIAAP RWH/RM/WW/JD

ACCESSION NR: AP4043549

S/0020/64/157/004/0926/0929

AUTHORS: Starik, I.Ye. (Corresponding member AN SSSR, Deceased);  
Ginzburg, F. L.; Rayovskiy, B. N.

TITLE: A study of the state of radioactive isotopes in extremely dilute solutions by a diffusion method

SOURCE: AN SSSR. Doklady\*, v. 157, no. 4, 1964, 926-929

TOPIC TAGS: diffusion, diffusion coefficient, radioactive isotope, Pu (IV), Zr (IV), Th (IV), Ce (III), Am (III), Cs (I), Sr (II), Cs<sup>137</sup>, Sr<sup>90</sup>, Ce<sup>144</sup>, Th<sup>234</sup>, mean ionic charge, polymerization, hydrolytic polymerization product, viscosity, colloidal polymer

ABSTRACT: The diffusion coefficients of Pu (IV), Zr (IV), Th (IV), Ce (III), Am (III), Cs (I) and Sr (II) were measured and these values were used in studying the hydrolytic polymerization products and determining the mean ionic charge of the isotopes Cs<sup>137</sup>, Sr<sup>90</sup>, Ce<sup>144</sup>, and Th<sup>234</sup>. Measurements were made by the open tube capillary method described by J.S. Anderson, K. Saddington (J. Chem. Soc., 1949, 381). The pH of the solutions was adjusted to counteract adsorption onto the capillary wall: for Pu (IV) and Zr (IV)-- no less  
Card 1/A3

L 22537-65

ACCESSION NR: AP4043549

than 1 molar; for Th (IV), Ce (III), Am (III)-- not under pH 2; for Cs (I), Sr (II)-- up to pH 11.5. Comparison of the diffusion coefficients for Pu (IV) and Ce (III) obtained above with values obtained by a method described by I.Ye. Starik and A.I. Yurtov (Radiokhimiya, 6, 4 (1964)) indicated the two methods yielded similar results. Viscosities were measured with an Ostwald viscosimeter; temperatures were  $25.0 \pm 0.05^\circ\text{C}$ ; all concentrations were under  $1 \times 10^{-5}$  gm. ion/l. Plotting the change in D/T (which was considered to show the change in the radius of the diffused particle) vs. acidity of the solution (fig. 1) showed polymerization occurred at about 0.3 M HCl for Zr (IV), at pH 1.4 for Pu (IV) and pH 3.7 for Th (IV). Solubility products were determined:  $\text{Th}(\text{OH})_4^- = 1 \times 10^{-46}$ ,  $\text{Pu}(\text{OH})_4^- = 1 \times 10^{-55}$ , and  $\text{Zr}(\text{OH})_4^- = 1 \times 10^{-59}$ . The polymers reached colloidal dimensions at a slightly lower hydrogen ion concentration than that at which the solubility product was reached. The coefficient of diffusion of zirconium in alkaline solutions showed it formed negatively charged particles beyond pH 7.5. Changing the  $\text{H}^+$  from 0.3 to 3 moles/l. did not cause any change in the rate of Zr and Th diffusion. This was assumed to confirm that ion mobility in dilute solutions is determined by the solvent structure. The

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L 22537-65

ACCESSION NR: AP4043549

increase in D /T for Sr (II), Ce (III) and Pu (IV) in more concentrated solutions was considered due to non-ideal solution and ion dehydration or change in complex composition. The relative decrease in the diffusion coefficients of ions on increasing their concentration from  $10^{-5}$  to  $10^{-3}$  gm. ions/l. was determined. Extrapolation of the  $D\eta/T - [C_{H^+}]$  curves to zero  $[H^+]$  gave values for the diffusion rates of Ce (III) and Sr (II) very close to values obtainable by the Nernst equation. The mean charge was calculated for the following ions, based on the Nernst equation and on correlation of experimental data: Sr (II)  $\approx 2.0$ ; Ce (III)  $\approx 3.0$ ; Th (IV)  $\approx 2.4$ ; Zr (IV)  $\approx 0$ ; Pu (IV)  $\approx 2.2$ . It was concluded that the relationship between the diffusion coefficient and the concentration of the diffused ion may be used to determine its mean charge in dilute solutions. Orig. art. has: 2 figures and 1 equations.

ASSOCIATION: None

SUBMITTED: 25Mar64

ENCL: 01

SUB CODE: IC, GC  
Card 3/4

NR REF SOV: 014

OTHER: 010

RAYEVSKIY, B.N.; ROMANOV, L.R.; SHAMOV, V.P.

Decade scaler equipped with transistors. Prib.i tekhn.eksp, no.5:62-  
64 S-0 '60. (MIREA 13:11)

1. Institut radiatsionnoy gigiyeny.  
(Nuclear counters)

STARIK, I. Ye. [deceased]; GINZBURG, F.I.; RAYEVSKIY, B.N.

State of radioisotopes in very thinly diluted solutions  
studied by the diffusion method. Dokl. AN SSSR 157 no.4:  
926-929 Ag \*64 (VIRA 17:8)

I. Chlen-korrespondent AN SSSR (for Starik).

RAYEVSKIY, D.A.; NEPOKLONOV, A.A., kand. biol. nauk; IVASHKOV, I.S.,  
starshiy nauchnyy sotrudnik; TALANOV, G.A., starshiy nauchnyy  
sotrudnik; PETRYAKOV, Ya.A.; USPENSKIY, P.A.

Composite method for controlling Hypoderma infestation. Veteri-  
nariia 42 no.12:37-41 D '65. (MFA 19:1)

1. Nachal'nik veterinarnogo otdela Oblastnogo upravleniya sel'skogo  
khozyaystva Tul'skoy oblasti (for Rayevskiy). 2. Vsesopuznyy  
nauchno-issledovatel'skiy institut veterinarnoy sanitarii (for  
Nepoklonov, Ivashkov, Talamov). 3. Zavednyushchiy Baykalskim  
veterinarnym uchastkom (for Petryakov). 4. Nachal'nik Nizhne-  
tilinskoy stantsii po bor'be s boleznyami zhivotnykh, Irkutskaya  
oblast' (for Uspenskiy).

RAYEVSKIY, D.A.; KHATIN, M.G., prof.; IVASHKOV, I.S., starshiy nauchnyy  
sotrudnik

Results of the first stage in the control of warble flies.  
Veterinariia 41 no.3:19-20 Mr '65. (MIRA 18:4)

1. Nachal'nik veterinarnogo otdela Tul'skogo oblastnogo upravleniya  
proizvodstva i zagotovok sel'skokhozyaystvennykh produktov (for  
Rayevskiy). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut  
veterinarnoy sanitarii (for Khatin, Ivashkov).

RAYEVSKIY, O. V.

Bee Culture - Study and Teaching

Dmitriev one-year school for beekeepers. Pchelovedstvo, 29 no. 10, 1952.

Monthly List of Russian Accessions, Library of congress. November 1952. Unclassified.

RAYEVSKIY, F., general-major tankovykh voysk; VASHCHILO, I., podpolkovnik;  
STEPANYAN, V., gvardii kapitan

Basic military training for the young recruits; comments on articles  
published in no.11, 1958. Voen. vest. 39 no.2:59-61 '59.  
(MIRA 12:7)  
(Military training)

RAYVESKIY

RAYVESKIY, G.

Auxiliary laboratory on the economics of the coke industry in the  
Stalino Economic Region. Koks i khim. no.9:59 '60. (MIRA 13:9)  
(Stalino Province--Coke industry)

BLAGODATNYY, V.M.; RAYEVSKIY, F.V.

General automatic control of a receiving bunker and feeder for a  
crushing-separating plant. Gor. zhur. no.9:74-75 S '61.  
(MIRA 16:7)

1. Nachal'nik laboratorii avtomatiki rudnika im. Dzerzhinskogo  
(for Blagodatny). 2. Starshiy inzh. laboratorii avtomatiki  
rudnika im. Dzerzhinskogo (for Rayevskiy).  
(Ore dressing--Equipment and supplies) (Automatic control)

RAYEVSKIY, G.V., kandidat tekhnicheskikh nauk

Stand for testing railroad cars for vibration. Tekh.zhel.dor.6  
no.10:31-32 0'47. (MLRA 8:12)  
(Railroads--Cars--Testing)

Maravskii, G. V.

Razvush, G. V. "The organization of electric welding work", Trudy Vsesoyuz. nauchno-tekhnicheskogo s'ezda po flyz., 3-6 October 1947, Kiev, 1948 p. 16-5.

See: 1-3201 to April 13, Letopis 'Zurnal 'nykh Stat'ey, No. 11, 1948).

RAYEVSKIY, G. V.

PA 42/49T18

USSR/Engineering

Welding

Tanks, Fuel

Jan 49

"Automatic Welding in the Manufacture of Petroleum Tanks," G. V. Rayevskiy, Cand Tech Sci, Inst of Elec Welding Instr Acad Ye. O. Paton, Acad Sci USSR, 2 pp.

"Avtogennoye Delo" No 1

Refers to disadvantages in types of petroleum tanks now used, especially to the impossibility of automatic welding of vertical side walls. Completely describes construction of a new tank, where existing faults have been corrected. Data 42/49T18

USER/Engineering (Contd)

Jan 49

obtained during construction of this new tank will be of great advantage for future constructions. Gives diagrams and illustrations of tank system.

42/49T18

RAYEVSKIY, G. V.

Rayevskiy, G. V. "One-sided butt welding on a flux-copper foundation",  
Trudy po avtomat. svarke pod flyusom (In-t elektrosvarki im. Paona),  
Collection 5, 1949, p. 31-47.

SO: U-4392, 19 August 53, (Letopis 'Zhurnal 'nykh Statey, No21, 1949).

RAEVSKIY, G. V.

27/65

Proverka Plotnosti svarykh Shwov Pri Pomoshchi Vakuumkamery. Trudy Po Avtomat.  
Svarke Pod Flyusom (in-t Elektrosvarki Im Patona), sb. 7 1949, s. 61-63.

SO: Leto;is' Zhurnal'nykh Statey, Vol. 37, 1949

RAYEVSKY, G. V.

MITK, M. S. I RAYEVSKY, G. V.

33174. Razrabotka Diplomnykh Provektov Po Zadaniyu Preizvodstva  
(Cryt In-Ta Elektrosvarki Im. Patona) Vestnik Vyssh. Shkoly, 1' 49,  
No. 9, c. 47-48

SC: Letopis 'Zhurnal 'nykh Statey, Vol. 45, Moskva, 1949

RAYEVSKIY, G. V.

Electric Welding

Application of shunting in making welded construction with thick sheets. Avtom. svar. 4,  
No. 6, (21) 1951.

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

1. RAYEVSKIY, P. V.
2. USSR (600)
4. Electric Welding
7. Conference on new welding methods. Avtob. delo 23 no. 12, 1952.
  
9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

RAYEVSKIY, G.V.

Making sizable tanks by the turning method. Avtom.svar. 6 no.5:  
83-88 S-0 '53. (MIRA 7:11)

1. Institut elektrosvarki im. Ye.O.Patona Akademii nauk USSR.  
(Tanks)

RAYEVSKIY. G.V., kandidat tekhnicheskikh nauk.

Certain tolerances in the manufacture of steel plate. Standartiza-  
tsiya no.1:45.47 Ja-F '54. (MLRA 7:2)

1. Institut elektrosvarki im. akademika Ye.O.Patona Akademii nauk  
USSR. (Plates, Iron and steel--Standards)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001444410006-7

RAYEVSKIY, G.V.

On the conditions of spreading and checking cracks due to  
brittleness. Avtom.svar. ? no.3:85-87 My-Je '54. (MLRA 7:?)  
(Welding)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001444410006-7"

RAYEVSKIY, G. V.

Distr: 4E2c/4F1

✓ Brittle Fracture of Welded Vessels and Other Constructions  
G. V. Rzhevskii. (Avtomatische Skrava, 1955; (6), 9-18).  
[In Russian]. Until vessels are filled, all their welded joints exhibit residual stresses caused by welding. These stresses are equal to the yield point of the steel and coincide, in direction, with the casting stresses. The fact that most vessels do not fail, however, shows that high residual stresses, as a rule, do not affect the strength of a welded construction of mild steel. Susceptibility to cold shortness and to the thermal effects of welding can be reduced during steel making. Stress concentrations caused by overlapping joints, non-continuous welds, manholes, etc. can be eliminated by good design. Cold shortness caused by operations under adverse conditions of climate can be avoided by gently heating the vessels. Steel quality is of prime importance and the Russians consider that the failure of Belgian welded bridges, for instance, is due to the use of low grade basic Bessemer steel. The Soviet Petroleum Ministry has specified killed steels instead of rimming steels for welded vessels.—E. S.

4  
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83/8

Inst. welding in. Ye-O Paton, A-N USSR

AID P - 5414

Subject : USSR/Engineering

Card 1/1 Pub. 11 - 4/13

Author : Rayevskiy, G. V.

Title : Flat-rolled thin-walled electrically welded pipes

Periodical : Avtom. svar., 5, 22-30, My 1956

Abstract : The author outlines construction of the flat-rolled pipes, the technology of their production by resistance automatic roller welding machine, their packing, transport and laying methods. Three photos, 3 drawings and 2 tables; 2 Russian references (1952-53).

Institution : Electrowelding Institute im. Paton

Submitted : 31 Je 1956

RAYEVSKIY, G.V., kandidat tekhnicheskikh nauk (Kiyev)

Using flat rolled pipes for welded low-pressure pipelines. Stroi.  
pred.neft.prom.2 no.1:9-12 Ja '57. (MLRA 10:3)  
(Petroleum--Pipelines)

RAYEVSKIY, G.V., kand. tekhn. nauk

Assembling flat rolled thin-walled pipes.[G.V.Raevskii's invention].  
Rats. i izobr. predl. v stroi. no. 4:83-86 '57. (MIRA 11:8)

1. Zaveduyushchiy laboratoriyye Instituta elektrosvarki imeni akad.  
Ye.O.Patona AN USSR.  
(Pipelines)

RAYEVSKIY, G.V.; BERNADSKIY, V.N.; LEBEDEV, B.F.; MARTYNOV, I.G.; TRUSHCHENKO,  
A.A.

Industrial methods for manufacturing pipes. Biul. stroi. tekhn. 14 no.5:  
10-13 My. 1957. (MIRA 10:6)

1. Institut elektrosvarki imeni Ye.O. Patona Akademii nauk USSR.  
(Pipe, Steel--Welding)

RAYEVSKIY, G.V.

New technique for the construction of tanks for the distilling  
industry. Spirit. prom. 24 no. 2:6-8 '58. (MIRA 11:3)  
(Tanks) (Distilling industries--Equipment and supplies)

RAYEVSKIY, G.V.

New methods of manufacturing tanks. Sakh.prom. 32 no.9:18-20  
(MIRA 11:11)  
S '58.

1. Institut elektrosvarki imeni Ye.O.Patona.  
(Tanks)

СИДОРЧУК, А. А., БЕЛАВЕНЦЕВ, А. А., СИДОРЧУК, А. А. (СИДОРЧУК)

"Industrial Methods of Building Oil Tanks in the Soviet Union."

Report submitted at the Fifth World Petroleum Congress, 30 May -  
5 June 1959. New York.

30V / 344-21

POLARIZATION

Akademie наук УРСР, Куйв., Institut elektronovii imeni Stepanova M. O. Potsa  
Promyshlennyyj promesnyj vystavlyayushchij, vyp. 2 (Introduktion of  
Collection of Articles, No. 2) Kuyv., Gos.  
Nauchno-tekhnicheskaya literatura, Leningrad, 1959. 154 p. Birotskaia slizh insert.

**Ed. V. Garkusha; Tech. Ed. I. A. Smirnovich.**  
**PURPOSE:** This book is intended for workers in the welding industry.  
**CONTENTS:** The book contains a discussion of welding techniques and problems by groups of scientists and workers. Much attention is given to problems in the area of mechanized welding and electro-slag welding. The application of new methods of mechanized welding and electro-slag welding is the second collection of articles under the same title. Previous parts of this collection were published in 1958. The editor of the present part is the Institute of Electronic Welding, U.S.S.R. The preface is written by B. E. Rason. The book is published by the Lenin Prize Recipient K. N. Kukuritsky, Head of the Institute of Sciences and Technology of Welding, Institute of Electronic Welding, USSR Academy of Sciences and Ministry of Heavy Industry. The book is published by the Institute of Electronic Welding, USSR Academy of Sciences and Ministry of Heavy Industry.

**Equipment by Electromechanics**, A. S. Seftonkov  
Medvedev, B. I. [Candidate of Technical Sciences], A. S. Seftonkov  
[Electrovertor Institute elektrovertor level 1e. O. Avots [Electric Winding  
Institute level 1e. O. Peton]], and I. N. Gorbunova [Head of Technical  
Department; Podol'skii metallostroy plant [Very good level 3. O. Orts-  
henevskii [Podol'skii Metallogorskii plant level 3. O. Ord. bestillable]]. Electro-  
vertor Institute [Mechanics department level 3. O. Ord. bestillable].

Pashchenko, I. N. [Candidate of Technical Sciences], V. P. Subbotinov  
[Candidate of Technical Sciences], I. S. of Techno-Scientific Institute  
[Senior Researcher], I. T. Prudnikova [Candidate of Technical Sciences],  
Electromechanical Faculty, T. G. Petrenko [Associate Professor, Doctor of Technical  
Sciences], L. A. Yuldasheva [Sovn. Postavka], Dept. Preparatory courses  
[Associate Professor], I. M. Kostylev [Associate Professor], Dept. Metallurgical  
Engineering, I. V. Kostyleva [Associate Professor], Dept. Metallurgical  
Engineering.

Plant Izmail G. I. Petrovskyi, T. F. Sotnikov [who became chairman of the plant] and N. A. Myasnikov [who was subsequently succeeded by V. Ye. Korolev] and N. A. Ryazantsev [who was subsequently succeeded by V. Ye. Korolev]. The ballized metal plant Izmail L. M. Gulyagin [who was subsequently succeeded by V. Ye. Korolev] and N. A. Ryazantsev [who was subsequently succeeded by V. Ye. Korolev].

Lashkevich, P. I. [Candidate of Technical Sciences], S. L. Maksimov [Candidate of Technical Sciences]. Institute of Electrotechnical Materials [Institute of Electrical Sciences]. Institute of Electric Building [Institute of Electrical Engineering].  
 Ya. O. Matrosova [Electric Building Institute].  
 Z. O. Kostyuk [Candidate of Technical Sciences]. University of Mathematics [University Institute].  
 Institute of Pipe Research [Institute of Pipe Research].  
 G. A. Frishke [Chief Engineer]. The Lubomirsky  
 Institute of Pipe Research [Institute of Pipe Research].  
 New Technique [New Technique].

**Geophysical Survey.** *Geophysical Survey of East Siberian Oil and Gas Pipe* [In straight-sew writing of large characters went V. O. Petros  
[Geophysicist], Institute [sic] Electrovodotekhnika, Leningrad].  
[Geophysicist G. V. [Geophysicist]; Institute [sic] Oil, V. O. Petros; [Chief]  
[Electro-geophysical Laboratory, Institute [sic] Oil, V. O. Petros; [Head]  
[Building and Assembling Trust]], and  
[Geophysicist Sovzachmontazhnyy, Trust (Building and Assembling Construction);  
A. M. Kuznetsov [Chief of the Department of Gas Pipeline Construction];  
Glavgas Sibir' [Main Administration of the Gas Industry of the USSR]. Mech-  
10

**PEREBRYAKOV, D.Y.** [Candidate of Technical Sciences, Winner of Lenin Prize, Institute of Electrification and Electrical Equipment, Institute of Electric Welding, Institute of Metallurgy, O. Paton [Electric Welding Institute], Ye. O. Paton [Chief Engineer], V. Ia. Hayradyk [Chief Engineer], V. Ia. Martynov [Ukrainian Metal Administration for Petroleum Refineries], Ye. P. Martynov [Head of Construction and Assembly Administration and Ye. P. Martynov [Head of Construction and Assembly Administration]

No. 701 FEB 7 Ministry of Supply RSPR Ministry of Construction, Trust 71, Introduction of the Method for Settlements in the Petroleum Industry.

**APPROVED FOR RELEASE: 06/15/2000**

**CIA-RDP86-00513R001444410006-7"**

SOV/68-59-8-22/32

AUTHORS: Pershin, A.V. and Rayevskiy, G.V.

TITLE: Methods of Decreasing Production Costs of Coke on the  
Makeyevsk Coking Works (Puti snizheniya sebestoimosti  
metallurgicheskogo koks na Makeyevskom koksokhimicheskem  
zavode)

PERIODICAL: Koks i khimiya, 1959, Nr 8, pp 49-51 (USSR)

ABSTRACT: The decrease in the production costs of coke on the  
above works is discussed. The decrease was due to a  
decrease in the cost of coal for coking (from  
113.84 roubles in 1954 to 110.57 roubles/ton in 1958)  
and an increase in the yield of coking products:  
(pyrogenic water and unaccounted losses decreased  
from 6.39% in 1954 to 3.08% in 1958). There are  
3 tables.

ASSOCIATION: Makeyevskiy koksokhimicheskiy zavod  
(Makeyevka Coking Works)

Card 1/1

18(5), 25(5)

SOV/125-59-9-4/16

AUTHOR: Rayevskiy, G.V., Candidate of Technical Sciences  
TITLE: Pre-Strained Constructions of Welded Tanks and Their Use  
PERIODICAL: Avtomaticeskaya svarka, 1959, Nr 9, pp 26-32 (USSR)

ABSTRACT: On the basis of numerous experiments, it was established that the process of welding entails considerable remnant stresses in welded metals. In computing constructions, these stresses have to be added to normal working strains. Here, the metal fluidity limit - as an admissible level for both combined stresses - is taken. It was also established that owing to the metal property of undergoing considerable plastic deformations, the remnant stresses do not practically exert any influence on the strength of welded construction. This led, in its turn, to the proposition of preparing vertical cylindrical tanks by the method of rolling flat metal sheets, that is, to use pre-strained construc-

Card 1/3

SOV/125-59-9-4/16

Pre-Strained Constructions of Welded Tanks and Their Use

tions for the erection of tanks. Residual stresses attain, as a result of metal being welded, the fluidity limit of low-carbon steel before the tank is put into operation and subjected to working stresses that appear at its filling. During the first charging of the tank, only a slight residual metal deformation takes place. The value of it in the zone of welded joints attains 0.2% which is only 1/10 of the value allowed in the production of steel constructions. Experience has shown that pre-strained constructions do not possess any particular shortcomings; on the contrary, they have more advantages as against constructions of tanks performed by assembling individual metal sheets. Hence the economy of metal used for building tanks. There are 2 tables, 2 diagrams and 9 Soviet references.

ASSOCIATION: Ordena trudovogo krasnogo znameni institut elektrosvarki imeni Ye.O.Patona AN USSR (Order of the Red Banner of Labor Institute of Electric Welding imeni

Card 2/3

SOV/125-59-9-4/16

Pre-Strained Constructions of Welded Tanks and Their Use

Ye.O. Paton, AS Ukr SSR)

SUBMITTED: June 8, 1959

Card 3/3

SOV/125-59-2/13

18(7),25(5)

AUTHOR:

Rayevskiy, G.V.

TITLE:

Transformation of None-Gabaritic Welded Metal Sheet Construction of Large Thickness by Elastic Deformation (Izgotovleniye negabaritnkh tolstostennikh svarynykh listovykh konstruktsiy sposobom uprugogo deformirovaniya)

PERIODICAL:

Avtomacheskaya svarka, 1959, Vol 12, Nr 3, pp 8-18  
(USSR)

ABSTRACT:

The process described can be used for transformation into cylindric constructions of large thickness, like pipes, tanks (diameter up to 10 meters). The metal sheets are bent into their cylindrical shape by means of rolling presses. This process is generally referred to as elastic deformation. According to the degree of deformation there is a one-coil and two-coil deformation. The admissible new diameter is determined in accordance with equations 1 and 7 from the initial diameter ( $d$ ), thickness of the steel of low carbon contents ( $b$ ), module of elasticity ( $e$ ) Pauson coefficient ( $\lambda$ ). Tables

Card 1/2

SOV/125-59-3-2/13

Transformation of None-Gabaritic Welded Metal Sheet Construction of  
Large Thickness by Elastic Deformation

1 and 2 give the diameters for one-coil and two-coil deformation for different thickness (10-100 mm) and the creeping factor ( $\sigma_3 = 28 \text{ kg/mm}^2$ ) of steel. Table 4 gives the same data for another 4 creeping factors. This method bears the advantage of considerable space economy for transport (Tab. 3) and furthermore of better results in welding (Fig. 5). There are 4 diagrams, 4 tables, 1 graph and 2 photographs.

ASSOCIATION: Ordena trudovogo krasnogo znameni institut elektrosvarki im. Ye. O. Patona AN USSR (Order of the Red Banner of Labor, Institute for Electro-Welding im. Ye. O. Paton)

Card 2/2

RAYEYSKIY, G.V.

## PHASE I BOOK EXPLOITATION SOV/5078

Akademiya nauk UkrSSR, Kiyev. Instytut elektrosvarky i svarkovaniya  
 Vnedreniye novikh sposobov svarki v proizvodstvennoi' stoykei. Vyp. 3.  
 (Introduction of New Welding Methods in Industry; Collection of Articles. v. 3.) Kiyev, Gos. izd-vo tekhn. literatury.  
 1960. 207 p. 5,000 copies printed.

Sponsoring Agency: Ordona Trudovogo Krassogo Znameni Institut elektrosvarki imeni akademika Ye. O. Patona Akademii nauk Ukrainskoj SSR.

Ed.: M. Pisarenko; Tech. Ed.: S. Matusevich.

PURPOSE: This collection of articles is intended for personnel in the welding industry.

COVERAGE: The articles deal with the combined experiences of the Institut elektrosvarki imeni Ye. O. Patona (Electric Welding Institute imeni Ye. O. Paton) and several industrial enterprises in solving scientific and engineering problems in welding technology. Problems in the application of new methods of mechanized welding and electroslag welding in industry are discussed. This is the third collection of articles published under the same title. The Foreword was written by B. Ye. Paton, Academician of the Academy of Sciences Ukrainian SSR and Lenin prize winner. There are no references.

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Bogdanov, O. V. [Candidate of Technical Sciences] and Leonid V. P. Linnik. Zniczic Welding Institute imeni Ye. O. Paton, V. Ya. Mayevskyi Chief Engineer, Ukrsvarkovetsbyt (Ukrainian SSR Rail Administration for Petroleum Marketing), and Ye. P. Martynov (Nach. stroitel'nno-monazhnoego upravleniya No. 70 (Chief of Building and Erection Administration No. 70) Tract 7, Ministerstva stroitel'stva RFSR (Trust 7 of the Ministry for Construction RSPSR). Introducing the Method of Rolling Up Welded Structures in the Petroleum Industry	84
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RAYEVSKIY, G.V.

Use of flat-rolled pipes in the construction of gas distribution  
systems. Gaz.prom. 5 no.10:25-29 O '60. (MIRA 13:10)  
(Gas distribution) (Pipe, Steel)

RAYEVSKIY, G.V.

Use of coiled sheet steel is a progressive trend in planning  
welded structures. Avtom.svar. 13 no.7:26-32 Jl '60.  
(MIRA 13:7)

1. Ordona Trudovogo Krasnogo Znameni Institut elektrosvarki im.  
Ye.O. Patona AN USSR.  
(Sheet steel--Welding)

29352  
S/133/61/000/011/005/010  
A054/A127

1.2300

AUTHORS: Paton, B. Ye., Member of the Academy of Sciences UkrSSR, Rayevskiy,  
G. V., Candidate of Technical Sciences

TITLE: Flat-coiled tubes

PERIODICAL: 'Stal', no. 11, 1961, 1012 - 1016

TEXT: The main drawbacks of conventional tube-production are that the tubes can only be delivered in relatively short lengths and that it is difficult to obtain thin-walled tubes with a sufficiently large tube-diameter-to-wall thickness ratio  $K = D/\delta$ . These drawbacks can be eliminated by using "flat-coiled" tubes, the technology of which was developed 7 years ago at the Institut elektrosvarki im. Ye. O. Patona (Electric Welding Institute im. Ye. O. Paton). This type of tube was employed successfully at an MTS near Kiev, on the oil-fields of Tartary and the oil-fields of Ukrglavneftsbty near Kiyev. The tubes are 100 - 150 mm in diameter and about 200 m long, their walls are 1.75 - 2.00 mm thick. The considerable length of the tubes delivered substantially reduces the costs of labor and materials required for welding; the small wall thickness approximately halved the steel consumption as compared with the tubes hitherto used.

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29352  
S/133/61/000/011/005/010  
A054/A127

Flat-coiled tubes

The new tubes consist of double-walled flat blanks, which are coiled during storage and delivery. They are uncoiled only at the mounting place and inflated by compressed air. The consumption of compressed air is only 8 - 10% higher than the amount used for testing conventional tubes. Flat-coiled tubes can be produced in four ways: 1) by flattening conventional tubes produced on roller-type resistance welders. For this purpose low-carbon rimmed steel should be used while clearance should be left between the tube walls at least as big as the wall thickness; 2) from strip: either by folding the strip in two places and welding in the middle or by folding the strip on one side and welding it on the other side. The tubes can also be produced by casting hollow blanks which are then flattened on the rolling mill. The blank walls are in contact only at the sides; in the middle part a special lubricant should be used to avoid the wall sticking together. A simple method is to weld together two slabs. Also in this case the blanks must be kept from sticking together in the middle by lubrication. This method is being tested at the Electric Welding Institute im. Ye. O. Paton and the Dzerzhinskiy and Il'ich Plants. 4) The most simple way is to make the tube from two strips welded at the edges. The test equipment for producing flat-coiled tubes is shown. The strength of the tubes depends on the metal plasticity in the zones of deformation

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29352

S/133/61/000/011/005/010  
A054/A127

## Flat-coiled tubes

during inflation of the tube. Low-carbon steels should therefore be used, with additives strengthening the ferrite. 08 KП (08kp) steel is more suitable than 10 CП (10sp). The steel should contain 0.07% C, 0.33 - 0.45% Mn and correspond to the following demands:  $\delta_B \leq 36 \text{ kg/mm}^2$ ,  $\delta_{10} \geq 35\%$ . Flat-coiled tubes are produced from pickled and hot rolled strip - the authors presume that cold-rolled metal would improve the tube-quality. The surface requirements of the strip are lower than for steels used in extruding operations, the ferrite-grain index should be between 6 and 8, ГОСТ 5639-51 (GOST 5639-51), the index for cementite: 0 - 2. For flat-coiled tubes the following standards are set at present:

Tube diameter, mm	100 - 114	152 - 165
Inflation pressure, kg/cm <sup>2</sup>	10	8
Maximum working pressure, kg/cm <sup>2</sup>	8	6

Laminations in the metal and differences in wall thickness of the strip forming the tube will adversely affect the quality. Tests of the strength of the new tubes show that although their critical external pressure is lower than with conventional tubes, due to the peculiarities of their cross-section shape, they are still sufficiently strong for ordinary working conditions. The speed of roller resistance welding of tubes with 2-mm walls is very low (1 m/min at the Lenin Plant, 1.5 m/min at the Zaporozh'ye ZMK). Therefore the Electric Welding Institute

Card 3A

29352

S/133/61/000/011/005/01  
A054/A127

Flat-coiled tubes

im. Ye. O. Paton has developed accelerated methods of roller resistance welding. On one of the strips longitudinal ribs are formed by rolling which indicates the place of the seam and promotes the heating of the metal in the zone being welded. The higher welding rate makes it possible to work without ignitron breakers and to use 50 cps alternating current. Under the supervision of A. I. Tselikov, Member of the Academy of Sciences USSR a high-capacity machine for continuous roller resistance welding has been designed, operating at a rate of 20 m/min. The long-forming device of the machine makes it possible to weld the end of each strip to the beginning of the next. Flat-coiled tubes are now produced in three plants, with diameters of 75 - 165 mm, wall thickness up to 2 mm and in lengths of 200 - 280 m; the external diameter of the coil can be 1.8 m. Special flanges on the tube ends eliminate the need to weld them together under field conditions. The use of the new tubes results in considerable savings. Assuming that 36 tons (3,300 m) of 4 - 12" tubes are used per oil-well, replacement of the conventional tubes by flat-coiled ones saves about 14.5 tons of metal. Laying 1 km of ordinary tubes costs 2,607.6 rubles compared to 1,301 rubles for flat-coiled ones. The amount saved per well is 4,312 rubles, i.e. 2 1/2 times the saving in metal. During the 7-Year Plan period the new tubes will save 90 million rubles. These cal-

- Card 4/5

29352

Flat-coiled tubes

S/133/61/000/011/005/010  
A054/A127

culations were made by Ye. F. Martinson. There are 6 figures.

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona AN UkrSSR (Electric Welding  
Institute im. Ye. O. Paton of the Academy of Sciences Ukrainskaya  
SSR)

Card 5/5

RAYEVSKIY, G.V.

Coincidence of longitudinal weld joints n the cylindrical part  
of a pressure vessel assembled from individual shells. Necessity  
of providing for an insert in the center of its bottom. Avtom.  
svar. 14 no.7:90 Jl '61. (MIRA 14:7)  
(Pressure vessels--Welding)

RAYEVSKIY, G.V.

Problems in the design of welded structures. Avtom. svar. 15  
no.6:6-12 Je '62. (MIRA 15:5)

1. Ordona trudovogo Krasnogo Znameni Institut elektrosvarki  
imeni Ye.O.Patona AN USSR.  
(Machinery—Welding) (Tanks—Welding)

RAYEVSKIY, G.V., kand.tekhn.nauk; BILETSKIY, S.M., inzh.; PAL'CHEVSKIY, A.S.,  
inzh.

Factory manufacture of outsize cement kiln bodies. Mont.i spets.  
rab.v stroi 24 no.12:2-6 D '62. (MIRA 15:12)

1. Institut elektrosvarki imeni Ye.O. Patona.  
(Cement kilns)

RAYEVSKIY, G. V.

"Welding in oil industry"

report to be submitted for the United Nations Conference on the  
Application of Science and Technology for the Benefit of the Least  
Developed Areas - Geneva, Switzerland, 4-20 Feb 63

RAYEVSKIY, G.V.

"Welded combination structures" by N.O.Okerblom. Reviewed by  
G.V.Raevskii. Avtom.svar. 16 no.2:87-88 £ '63. (MIRA 16:4)  
(Structural frames—Welding) (Okerblom, N.O.)

RAYEVSKIY, G.V.

Flat-folding welded framework structures. Avtom. svar. 16  
no.8:58-64 Ag '63. (MIRA 16:8)

1. Institut elektrosvarki imeni Ye.O. Patona AN UkrSSR.  
(Structural frames—Welding)

RAYEVSKIY, G.V., kand. tekhn. nauk

Designing welded construction used in the manufacture of  
machinery. Vest. mashinostr. 43 no.7:7-11 J1 '63.  
(MIRA 16:8)  
(Machinery—Design and construction)  
(Welding)

ACCESSION NR: AP4039560

S/0135/64/000/005/0020/0022

AUTHOR: Rayevskiy, G. V. (Candidate of technical sciences)

TITLE: Production of nonstandard welded structures

SOURCE: Svarochnoye proizvodstvo, no. 5, 1964, 20-22

TOPIC TAGS: welded structure, nonstandard weld, shell, boiler shell, iron shell, elasticity limit, plasticity limit, collapsible structure, metal sheet rolling, shell transportation, rolling, iron sheet folding

ABSTRACT: A theoretical investigation was carried out to improve the current technique of metal sheet folding and rolling to the dimensions prescribed by the government shipment regulations. Institut elektrsovarki im. Ye. O. Patona (Institute of Electrical welding) was responsible for developing a new technical variant for the fabrication of sheet metal structures. This procedure was called the "Temporary Deformation Method" and was described by G. V. Rayevskiy (Izgotovleniye negabarditnykh tolstostennnykh listovykh konstruktsiy sposobom vremennogo deformirovaniya "Avtomaticeskaya svarka", 1959, No. 3). In order to preserve proper geometrical forms of the articles folded, this method called for a

Card 1/4

ACCESSION NR: APl4039560

decrease of metal-shell diameters and for a preservation of the amount of deformation in all parts of the metal shell. The metal shells consisted of several sheets welded together with one seam left free (to allow coiling). This seam is to be eventually field-welded at the place of its destination. The best results are obtained when the diameter reduction takes place twice: once during the sheet rolling, and once in the process of temporary deformation. To eliminate the radius of curvature changes which constitute the main reason for the increase in residual deformation and destroy the form of the article, various preventive devices were designed. They consisted of circular braces tightened outside the rolled shell and of special stretching devices installed inside the roll as shown on Fig. 1 of the Enclosure. Their purpose was to maintain the length of the chord in the section of sheet overlap. The author concludes that with the new method the sheets can be rolled to considerably smaller diameters without any damage to the metal qualities or the dimensions of the product. Orig. art. has: 1 table and 5 figures.

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona (Institute of Electrical Welding)

SUBMITTED: 00

DATE ACQ: 14Jun64

ENCL: 01

Cord 2/4

ACCESSION NR: AP4039560

SUB CODE: MM

NO REF Sov: 000

OTHER: 007

Card 3/4

ACCESSION NR: AP4039560

ENCLOSURE: 01

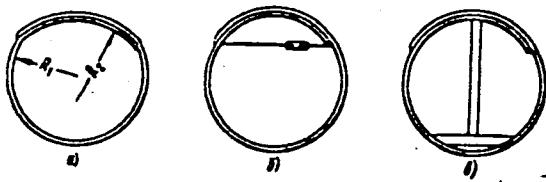


Fig. 1. Means for maintaining the proper shape of a shell.

Card 4/4

PATON, B.Ye., akademik, ntv. red., ASNIS, A.Ye., doktor tekhn. nauk, red.; KAZINIROV, A.A., kand. tekhn. nauk, red.; KASATKIN, B.S., doktor tekhn. nauk, red.; RAYEVSKIY, G.V., doktor tekhn. nauk, red.; TRUFYAKOV, V.I., kand. tekhn. nauk, red.; SHEVERNITSKIY, V.V., kand. tekhn. nauk red. [deceased]; GILELAKH, V.I., red.

[Design of welded structures; reports] Proektirovaniye svarnykh konstruktsii; doklady. Kiev, Naukova dumka, 1965. 426 p. (MIRA 18:6)

1. Vsesoyuznaya konferentsiya po proektirovaniyu svarnykh konstruktsii, Kiev, 1963.

L 7010-66 EWT(d)/EPA(s)-2/EWT(m)/EWP(c)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWP(l)/  
ACC NR: AP5026800 EWA(c)/ETC(m) JD/SOURCE CODE: UR/0286/65/000/017/0081/0081  
WW/HM

INVENTOR: Rayevskiy, G. V.; Trushchenko, A. A.; Petrushkin, V. F.

ORG: none

TITLE: A device for checking the air tightness of welded joints. Class 42, No.  
174405

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 81

TOPIC TAGS: welding inspection, leak detector 10

ABSTRACT: This Inventor's Certificate introduces a device for checking the air tightness of welded joints in hollow parts using an open chamber with elastic air-tight gaskets, which is placed on the part to be inspected and then evacuated. The testing process is automated by suspending the chamber from the piston rods of two cylinders which are mounted on a movable trolley and used for holding the chamber to the surface of the article being checked by creating a vacuum in the cylinder cavities.

SUB CODE: IE/ SUBM DATE: 11Jul63/ ORIG REF: 000/ OTH REF: 000

Card 1/2

UDC: 620.29 : 621-46 : 621.791.052  
0701 1159

L 7010-66

ACC NR: AP5026800

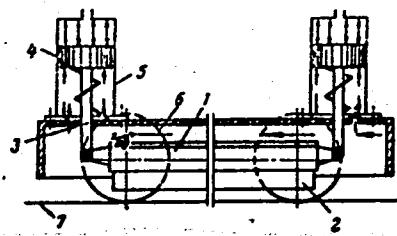


Fig. 1. 1 - chamber; 2 - gasket; 3 - rod; 4 - piston;  
5 - cylinder; 6 - trolley; 7 - surface being inspected.

nw  
Card 2/2

L 46103-66 EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/EII/EWP(k) JD/HW  
ACC NR: AR60004444 SOURCE CODE: UR/0137/65/COO/009/E011/E011

AUTHOR: Rayevskiy, O. V.

15  
B

TITLE: New methods for preventing brittle failure in welded constructions  
16 14

SOURCE: Ref. zh. Metallurgiya, Abs. 9E72

REF SOURCE: Sb. Proyektir. svarn. konstruktsiy. Kiyev, Nauk. dumka, 1965, 349-353

TOPIC TAGS: welding technology, brittleness, fabricated structural metal,  
compressive stress

ABSTRACT: Prevention of brittle failure in welded constructions constitutes an  
important problem of contemporary technology. Such failures occur at low temperatures.  
The methods for preventing brittle failures of welded constructions by using  
construction schemes are analyzed. These methods involve the use of layered  
inserts or an application of technical means to prevent transmission of compressive  
stresses. V. Fomenko. [Translation of abstract] 17

SUB CODE: 13, 11

UDC: 621.791.001:539.4

Card 1/1 - C

(A) L 65138-65 EWT(m)/EWP(t)/EWP(k)/EWP(l)/EWA(c) JD/EW

ACCESSION NR: AP5021639

JR/0286/65/000/013/0125/0125

AUTHORS: Balitskiy, V. M.; Rayevskiy, G. V.; Popovskiy, B. V.

TITLE: A method for producing enclosed hollow structures, such as pontoons.  
Class 81, No. 172682

SOURCE: Byulleten' izobreteniy i tovarknykh znakov, no. 13, 1965, 125

TOPIC TAGS: pontoon, sheet metal, fabricated structural metal, construction material

ABSTRACT: This Author Certificate presents a method for producing enclosed hollow structures, such as pontoons, from bands connected to one another along the rims and rolled into a scroll. This material is expanded by internal pressure of water or air at the site of construction. To increase the rigidity and maintain the desired dimensions, at the site of construction the scroll is unrolled into a sheet, which is then fixed to a rigid framework and expanded by internal pressure produced by either water or air.

ASSOCIATION: none

Card 1/2

L 65138-65

ACCESSION NR: AP5021639

SUBMITTED: 06Sep63

ENCL: 00

SUB CODE: IE

NO REF Sov: 000

OTHER: 000

*b6b*  
Card 2/2

RAYEVSKIY, G.V.

Research work in the field of coal chemicals industry economics.  
Koks i khim. no.2:55-57 '63. (MIRA 16:2)

1. Tsentral'naya issledovatel'skaya laboratoriya po ekonomike  
koksokhimicheskoy promyshlennosti.  
(Coke industry—By-products)

RAYEVSKIY, G.Ye., CHINAYEV, P.P.

Anopheles mosquitoes in the construction zone of the Farkhad  
Hydroelectric Power Station. G.E. Raevskii, P.P. Chinaev.  
Med. paraz. i paraz. bol. 27 no.2:224 Mr-Ap '58 (MIRA 11:5)

1. Iz Instituta malyarii, meditsinskoy parazitologii i gel'  
mintologii Ministerstva zdravookhraneniya SSSR i iz Uzbekistsanskogo  
instituta malyarii i meditsinskoy parazitologii.  
(BEGOVAT DISTRICT--MOSQUITOES)

LUK'YANOVENKO, B.Ye.; RAYEVSKIY, I.B.

Significance of lymphography in some malignant diseases of  
the lymphatic system. Vest. rent. i rad. 40 no.1:32-41 Ja-F '65.  
(MIRA 18:6)  
I. Rентгенодиагностический отдел (зав.-проф. Л.С. Розенштрух)  
Научно-исследовательского рентгено-радиологического института и  
Московский городской онкологический диспансер (главный врач  
Р.Е. Вакхневич).

MINOV, R.P.; VYUNKIV, I.V.

Clinical use of the antibiotic olivomycin. Antibiotiki 9 no.7:  
64-652 JI '64.  
(MIRA 12:3)

I. Moskovskiy gerodiskoy onkologicheskiy dispanser (glavnyy vrach  
P.Ye. Vakkhevich).

RAYEVSKIY, I. G.

Evaluation of the immediate results of treating lymphogranulomatosis with dopan and degranol. Vop. onk. 8 no.4:3-11 '62.  
(MIRA 15:4)

1. Iz Instituta eksperimental'noy i klinicheskoy onkologii AMN  
SSSR (dir. - prof. N. M. Blokhin)

(HODGKIN'S DISEASE) (DOPAN) (DEGRANOL)

ACC NR:AP7005751

(A)

SOURCE CODE: UR/0126/67/023/001/0028/0036

AUTHOR: Alekseyevskiy, N. Ye.; Ivanov, O. S.; Rayevskiy, I. I.; Step-anov, N. V.

ORG: Institute of Metallurgy im. A. A. Baykov, Academy of Sciences  
SSSR (Institut metallurgii)

TITLE: Phase diagram of the niobium titanium-zirconium system and  
superconducting properties of its alloys

SOURCE: Fizika metallov i metallovedeniye, v. 23, no. 1, 1967, 28-36

TOPIC TAGS: niobium, titanium, zirconium, system, niobium-titanium  
~~zirconium alloy, alloy phase diagram, alloy phase composition, alloy~~  
~~structure system, superconducting alloy~~

ABSTRACT: A study has been made of several alloys of the niobium-titanium-zirconium system at five sections with a constant niobium content of 6, 12, 30, 50 and 70%. Alloys were melted from 99.7%-pure iodide zirconium, 99.8%-pure iodide titanium and 99.7%-pure cermet niobium. Phase diagrams of the system at 500, 550, 600 and 800°C were plotted on the basis of obtained data. It was found from the phase diagrams that the area of splitting into two solid solutions  $\beta_{Nb} + \beta_{Zr}$  gradually narrows with the introduction of titanium

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UDC: 669.017:537.312.62

ACC NR: AF7005751

into the alloys. At temperatures below 525°C, ternary alloys of the area adjacent to the niobium corner of the system are in a two-phase state  $\beta_{Nb}$  +  $\alpha$ Ti-Zr. The one-phase area of  $\beta_{Nb}$ -solid solution at 550—500°C juts out into the ternary system along the line bisecting the niobium angle of the diagram. An even decrease of the critical temperature of transition to the superconducting state was observed in alloys which were in the state of  $\beta$ -solid solution and were subjected to a high degree of cold deformation (96% reduction). At a complete replacement of zirconium with titanium, this decrease was 1—2°K (see Fig. 1). In sections at 30 and 50% (Ti + Zr) of

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ACC NR: AP7005751

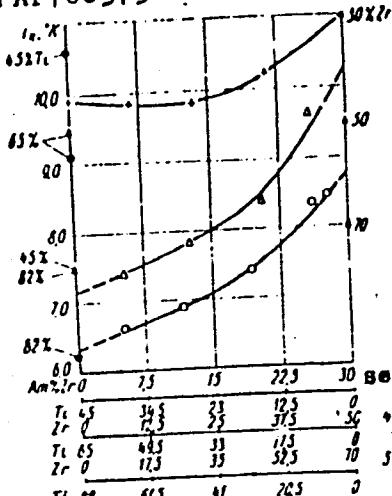


Fig. 1. Composition dependence of the temperature of transition to the superconducting state for alloys of the niobium-titanium-zirconium system

▲ - [6] Cast specimens; ● - [5] cold deformation (96% reduction); sections: + - 3; △ - 4, ○ - 5.

alloys cold-deformed and annealed at 550°C, only a small decrease of critical current density in a field of 20,000 oersteds was noticed when about half the zirconium was replaced with titanium. Orig. art. has: [TD]

10 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: none/ ATD PRESS: 5117

Card 3/3

RAYEVSKIY, I.M. (Stavropol')

Double channel commutator for an electronic oscillograph. Fiz.v  
shkole 22 no.1:65-67 Ja-F '62. (MIRA 15:3)  
(Oscillograph)

S/120/65/000/001/055/072  
E192/E382

AUTHOR: Rayevskiy, I.M.

TITLE: Four-channel electronic switch based on transistors

PERIODICAL: Pribory i tekhnika eksperimenta, no. 1, 1963,  
179 - 181

TEXT: The switching system is designed for simultaneous display of four different processes on the screen of a single-beam oscilloscope. The system operates on the principle of generating a train of pulses by a counter and a logic "AND" circuit. The switch consists of six individual units: individual amplifiers for the four channels (each employing a single transistor); a multiple coincidence circuit based on diodes; a transistor multivibrator; a transistor frequency-divider (binary); a transistor blocking oscillator and a power supply. The input amplifiers are in the form of emitter-followers connected to a common load; the signal from this load is fed to the oscilloscope. The amplifiers are successively gated by applying negative rectangular pulses to their bases. These pulses are generated by a combination of the multivibrator, the dividing binary and the

Card 1/2

Four-channel electronic switch ....

S/120/63/000/001/055/072  
E192/E382

coincidence circuit. The multivibrator is synchronized by the blocking oscillator which also produces negative pulses for blanking the cathode-ray tube during the changeover interval between the channels. The switch can be used at frequencies between 4 and 400 c.p.s. and has an interchannel coupling coefficient of 2%. The switching frequency is 5 kc/s and the maximum input signal is 20 V. There are 3 figures.

ASSOCIATION: Stavropol'skiy gosudarstvennyy pedagogicheskiy  
Institut (Stavropol' State Pedagogical Institute)

SUBMITTED: March 2, 1962

Card 2/2

RAYEVSKIY, I.M.

Four-channel electronic commutator on semiconductor devices.  
Prib. i tekhn. eksp. 8 no.1:179-181 Ja-F '63. (MIRA 16:5)

1. Stavropol'skiy gosudarstvennyy pedagogicheskiy institut.  
(Electric switchgear) (Semiconductors)

RAYEVSKIY, I.M.

Electric boiler with remote control. Politekh. obuch. no.7:57-59  
Jl '59. (MIRA 12:9)

1. Stavropol'skiy pedinstitut.  
(Boilers) (Remote control)

RAYEVSKIY, I.M. (Stavropol')

Simple generator of rectangular pulses. Fiz. v shkole 20 no.6:68-  
69 N-D '60. (MIRA 14:2)  
(Oscillators, Electric)

RAYEVSKIY, I. M.

Amplifiers for school galvanometers. Fiz. v shkole 20 no.3:78-80  
My-Je '60. (MIRA 13:11)

1. Pedagogicheskiy institut, g. Stavropol'.  
(Amplifiers, Electron-tube) (Galvanometer)

RAYEVSKIY, I.P.

Spectral apparatus in the second half of the 19th century.  
Trudy Inst.ist.est.i tekhn. 28:377-404 '59.

(MIRA 13:5)

(Spectrum analysis)

RAYEVSKIY, I.P. (Tambov)

Evolution of the representations of the role of the instrument  
in spectrum Analysis. Vop. ist. est. i tekhn. no.13:73-75 '62.  
(MIRA 16:5)  
(Spectrum analysis)

RAYEVSKIY, I.Ye.

Effect of the dimensions of stamps on the character of the  
settlement of loess soil. Osn., fund.1 mekh.grun. 4 no.5:14-18  
'62. (MIRA 15:12)

(Loess--Testing)

RAYEVSKY, I. Ye.

Study of the subsidence of loessal soils by stamps (in Kherson).  
Izv. vys. ucheb. zav.; geol. i razv. 8 no. 12:86-94 D '65  
(MIRA 19:1)

1. Novo-Kakhovskiy obshchetekhnicheskiy fakul'tet Odesskogo  
inzhenerno-stroitel'nego instituta.

VOTCHAL, Boris Yevgen'yevich; KAYEVSKIY, K.S., red.

[Studies in clinical pharmacology] Ocherki klinicheskoi  
farmakologii. Moskva, Meditsina, 1965. 489 p.  
(MIRA 18:12)

RAYEVSKIY, K.S.; TIMOFEYEV, V.A.

Multichannel device for recording the motor activity of small laboratory animals (rats, mice). Biul. eksp. biol. i med. 59 no.6:114-116 Je '65. (MIRA 18:6)

1. Institut farmakologii i khimioterapii (dir. - deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov) AMN SSSR i Spetsial'noye konstruktorskoye byuro (nachal'nik Ye.M. Bazarnyi) Instituta radiotekhniki i elektroniki (dir. - akademik V.A. Kotel'nikov) AN SSSR, Moskva.

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001444410006-7

BUKOVSKY, N.S. (Bukovskiy)

Scientific conference held under the auspices of the  
Institute of Pharmacology and Toxicology of the Academy of  
Medical Sciences of the U.S.S.R. Tvert. Akad. Nauk SSSR, 8:73-76  
'64.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001444410006-7"

L 27611-66 JT

ACC NR: AP6018477

SOURCE CODE: UR/0219/65/059/006/0114/0116

AUTHOR: Rayevskiy, K. S.; Timofeyev, V. A.

ORG: Institute of Pharmacology and Chemotherapy/directed by Active member AMN SSSR, Professor V. V. Zakusov/AMN SSSR (Institut farmakologii i khimioterapii AMN SSSR); Special Design Office/headed by Ye. M. Bazamnyy/Institute of Radio Engineering and Electronics/directed by Academician V. A. Kotel'nikov/, AN SSSR, Moscow (Spetsial'noye konstruktorskoye byuro Instituta radiotekhniki elektroniki AN SSSR)

TITLE: Multichannel device for recording motor activity in small laboratory animals (rats and mice)

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 59, no. 6, 1965, 114-116

TOPIC TAGS: bioinstrumentation, electronic equipment, rat, mouse, pharmacology

ABSTRACT: The authors modified Knoll's method, which involves the animal moving along a corridor and successively closing a circuit consisting of metal plates connected to the ground and a control grid of a radio tube that functions as an amplifier. Each movement of the animal from plate to plate triggers a pulse counter. The proposed modification entails the use of plates of different sizes - large for rats and small for mice. The individual activity of 20 mice and 10 rats can be recorded simultaneously, a valuable feature for mass pharmacological trials of new drugs.

The article summarizes the results of measuring spontaneous motor activity in mice and rats under normal conditions and after the injection of amphetamine sulfate and chlorpromazine. Use of the proposed device makes it possible to study a great many animals. The results lend themselves to statistical processing. The method is simple and reliable. This paper was presented by Active member AMN SSSR V. V. Zakusov. Orig. art. has: 1 fig. and 2 tables. JPRS

SUB CODE: 09 06 / SUBM DATE: 26 Nov 63 / 10TH REF: 015 UDC: 615.78-092.259:612.76:612.76-06:615.78

RAYEVSKIY, K. S., <sup>N</sup> CAND MED SCI, "ANTISPASMODIC PROPERTIES  
OF CERTAIN DERIVATIVES OF PHENOTHIAZINE." MOSCOW, 1960.  
(ACAD MED SCI USSR). (KL, 2-61, 219).

-275-

E" CERFTA MEDICA Sec 8 Vol 12/11 Neurology Nov 59

1554. THE ANTICONVULSANT PROPERTIES OF SOME PHENOTHIAZINE DERIVATIVES (Russian text) - RAYEVSKII, K. I. - ZH. NEVROPAT. I PSIKHAT. 1959, 59(2), 129-134) Graphs 1-Tables 1

Several phenothiazine derivatives were tested in animal experiments as to their anticonvulsant properties. The preparations tested were: aminazine (promazine), propazine, acepromazine (the French preparation piegutil), mepazine (pacatal), chlormepazine, etaperazine (trilafon) and its chlorine-free analogue, dinezine (disparcol), chlorazine, chloractizine, and all of them were compared with luminal. The anticonvulsant effect of each drug and of luminal was found by establishing the dose of i.v. administered corazol needed to provoke the phase of tonic extension in white mice. This dose is called the DTE (dose of tonic extension). The anticonvulsant effect of all the drugs tested was relatively weak. Aminazine has very little effect in this respect. Etaperazine, acepromazine, chlorazine and mepazine are more effective than the rest of the drugs in this series. Except for mepazine, the anticonvulsant action decreases with increasing dosages. The maximum anticonvulsant effect was determined for each of the drugs tested.

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